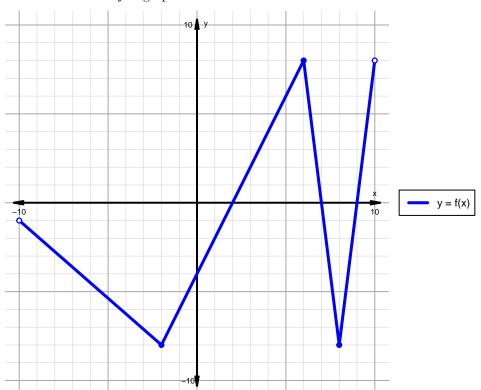
## Intervals, Transformations, and Slope EXAM (version 144)

1. The function f is graphed below.

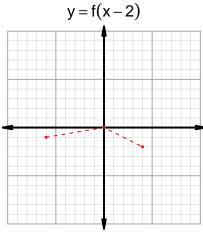


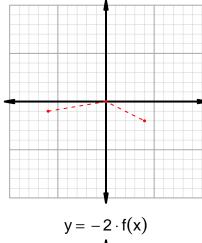
Indicate the following intervals using interval notation. Remember, you can use  $\cup$  between two intervals to indicate the union. Except for range, all intervals will indicate x values; this is standard.

Feature	Where
Positive	
Negative	
Increasing	
Decreasing	
Domain	
Range	

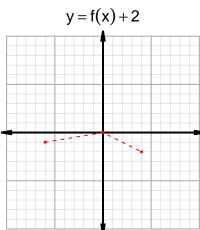
## Intervals, Transformations, and Slope EXAM (version 144)

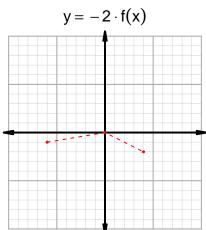
2. In the four graphs below, y = f(x) is graphed as a dotted line. With a solid line, please graph the transformations indicated by the equations below.





 $y = f(-2 \cdot x)$ 





3. Let function g be defined by the table below. Use the formula  $\frac{g(x_2)-g(x_1)}{x_2-x_1}$  to find the average rate of change between  $x_1=81$  and  $x_2=90$ . Express your answer as a reduced fraction.

g(x)
81
90
33
12